

IN THE CLAIMS

1-13 (canceled).

14. (currently amended) Apparatus for measuring a property of a fluid comprising a tube for retaining said fluid, said tube including an outer wall, a lateral access opening in said outer wall, and a domed portion including a sealing surface on said ~~outside~~outer wall of said tube surrounding said lateral access opening, and a sensor sealingly disposed on said sealing surface surrounding said lateral access opening in said tube for direct contact with said fluid in said tube for sensing said property of said fluid in said tube.

15. (previously presented) The apparatus of claim 14 wherein said sealing surface comprises a level surface.

16. (previously presented) The apparatus of claim 14 wherein said domed portion of said tube comprises a bend in said entire tube.

17. (previously presented) The apparatus of claim 14 wherein said domed portion of said tube comprises an outward bulge on one side of said tube.

18. (previously presented) The apparatus of claim 14 wherein said sealing surface comprises the wall of said tube.

19. (previously presented) The apparatus of claim 14 including adhering means for adhering said sensor to said sealing surface.

20. (previously presented) The apparatus of claim 14 wherein said sensor comprises a sensor selected from the group consisting of a temperature sensor, a pressure sensor, a flow meter, and a conductivity sensor.

21. (previously presented) The apparatus of claim 15 including a leveled-off planar portion of said wall of said tube on said outer side of said domed portion thereby providing said lateral access opening.

22. (previously presented) The apparatus of claim 21 wherein said leveled-off planar portion of said wall comprises a ground-off portion thereof.

23. (previously presented) The apparatus of claim 14 wherein said tube is elastic.

24. (previously presented) The apparatus of claim 14 wherein said tube is flexible.

25. (previously presented) The apparatus of claim 14 wherein said tube is rigid.

26. (previously presented) The apparatus of claim 25 wherein said tube comprises a material selected from the group consisting of metal, plastic and glass.

27. (previously presented) A dialysis monitor including apparatus for measuring a property of a fluid as set forth in claim 14.

28. (new) Apparatus for measuring a property of a fluid comprising a tube for retaining said fluid, said tube including an outer wall, a lateral access opening in said outer wall, and a domed portion including a sealing surface on said outer wall of said tube surrounding said lateral access opening, and a sensor in direct contact with said lateral access opening for sealing said sealing surface and for direct contact with said fluid in said tube for sensing said property of said fluid in said tube.

29. (new) The apparatus of claim 14 wherein said sealing surface comprises a cut-away portion of said domed portion of said tube providing a substantially flat sealing surface on said outer wall of said tube.

30. (new) The apparatus of claim 14 wherein said sensor does not extend within said tube in a manner to significantly reduce the cross-sectional area of said tube.

31. (new) The apparatus of claim 29 wherein said sealing surface comprises a cut-away portion of said domed

portion of said tube providing a substantially flat sealing surface on said outer wall of said tube.

32. (new) The apparatus of claim 30 wherein said sensor does not extend within said tube in a manner to significantly reduce the cross-sectional area of said tube.